HN

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,735	10/23/2001	Sheng (Ted) Tai Tsao	Q01-1002-US1	2686

7590 01/13/2005	EXAMINER
ROBERT A. SALTZBERG	BAYARD, DJENANE M

ROBERT A. SALTZBERG
MORRISON & FOERSTER LLP
425 MARKER STREET
SAN FRANCISO, CA 94105

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _23 October 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-26_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-26_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _7/9/03_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

2. A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 1-17 and 21-24 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-17 and 24-27 of copending Application No. 10/116,511. This is a <u>provisional</u> double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-2, 7-15, 17-23, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,640,278 to Nolan et al in view of U.S Patent Application No. 2003/0033308 to Patel et al.

a.   As per claims 1,9 and 21, Nolan et al teaches a method for configuration and

management of storage resources in a storage network. Furthermore, Nolan et al teaches a

method for communicating content to a plurality of clients, comprising the steps of: (a) providing

multiple network attached storage (NAS) servers (See Col.6, lines 11-20); (b) storing content

files on each NAS server for access by one or more clients (See col. 6, lines 55-65); (c) receiving

a request for a content file from a client via a communication link (See col. 6, lines 63-67);

However, Nolan et al failed to teach (d) selecting one of the NAS servers that stores the

requested content file; (e) establishing a data stream between that client and the selected NAS

server; and (f) providing the requested content file from the selected NAS to the requesting client

via the data stream, independent of other NAS servers.

Patel et al teaches selecting one of the NAS servers that stores the requested content file;

(e) establishing a data stream between that client and the selected NAS server; and (f) providing

the requested content file from the selected NAS to the requesting client via the data stream,

independent of other NAS servers (See page 4, paragraph [0063]).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate selecting one of the NAS servers that stores the requested content file;

(e) establishing a data stream between that client and the selected NAS server; and (f) providing

the requested content file from the selected NAS to the requesting client via the data stream,

independent of other NAS servers as taught by Patel et la in the claimed invention of Nolan et al

in order to allow t e intelligent distributed file system to utilize a data structure to track and

mange detailed information about each file, including for example the device and block location

of the file's data block, to permit different levels of replication and / or redundancy within the

file system (See page 1, paragraph [0008]).

b.   As per claim 2, Nolan et al in view of Patel et al teaches the claimed invention as

described above. However, Nolan et al failed to teach wherein step (d) further includes the steps

of determining if one of the NAS servers stores the requested content file, and if so, selecting

that NAS server and performing steps (e) and (f).

Patel et al teaches the steps of determining if one of the NAS servers stores the requested content

file, and if so, selecting that NAS server and performing steps (e) and (f) (See page 4, paragraph

[0063]).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate wherein step (d) further includes the steps of determining if one of the

NAS servers stores the requested content file, and if so, selecting that NAS server and

performing steps (e) and (f) as taught by Patel et al in the claimed invention of Nolan et al in

order to allow t e intelligent distributed file system to utilize a data structure to track and mange

detailed information about each file, including for example the device and block location of the

file's data block, to permit different levels of replication and / or redundancy within the file

system (See page 1, paragraph [0008]).

c.   As per claim 7, Nolan et al in view of Patel et al teaches the claimed invention as

described above. However, Nolan et al failed to teach further includes the steps of: receiving

multiple requests for content files from multiple clients; step (d) further includes the steps of: for

each requesting client, selecting one of the NAS servers that stores the content file requested by

that client; step (e) further includes the steps of: establishing a data stream between each

requesting client and the selected NAS server for that client; and step (f) further includes the

steps of: providing each requested content file from a selected NAS server to the requesting

client via the corresponding data stream, independent of other NAS servers.

Patel et al teaches further includes the steps of: receiving multiple requests for content

files from multiple clients; step (d) further includes the steps of: for each requesting client,

selecting one of the NAS servers that stores the content file requested by that client; step (e)

further includes the steps of: establishing a data stream between each requesting client and the

selected NAS server for that client; and step (f) further includes the steps of: providing each

requested content file from a selected NAS server to the requesting client via the corresponding

data stream, independent of other NAS servers. (See page 4, paragraph [0063]).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate further includes the steps of: receiving multiple requests for content

files from multiple clients; step (d) further includes the steps of: for each requesting client,

selecting one of the NAS servers that stores the content file requested by that client; step (e)

further includes the steps of: establishing a data stream between each requesting client and the

selected NAS server for that client; and step (f) further includes the steps of: providing each

requested content file from a selected NAS server to the requesting client via the corresponding

data stream, independent of other NAS servers as taught by Patel et la in the claimed invention of

Nolan et al in order to allow t e intelligent distributed file system to utilize a data structure to

track and mange detailed information about each file, including for example the device and block

location of the file's data block, to permit different levels of replication and / or redundancy within the file system (See page 1, paragraph [0008]).

d.   As per claim 8, Nolan et al in view of Patel et al teaches the claimed invention as described above. Furthermore, it is inherent to one with ordinary skill in the art that multiple request are random in time as Network Attached Storage is optimized for storage transaction and support large amount of data.

e.   As per claim 10, Nolan et al in view of Patel et al teaches the claimed invention as described above. However, Nolan et al failed to teach a switch for connecting the clients to the NAS servers in response to control signals, via a communication line.

Patel et al teaches a switch for connecting the clients to the NAS servers in response to control signals, via a communication line (See page 4, paragraph [0051]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a switch for connecting the clients to the NAS servers in response to control signals, via a communication line as taught by Nolan et al in view of Patel in order to establish communication between the smart storage unit and the server (See page 4, paragraph [0051]).

f.   As per claim 11, Nolan et al in view of Patel et al teaches the claimed invention as described above. However, Nolan et al failed to teach wherein the switch is configured to provide data routing between the NAS server and the clients.

Patel et al teaches wherein the switch is configured to provide data routing between the NAS server and the clients (See page 4, paragraph [0051]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the switch is configured to provide data routing between the NAS server and the clients in order to establish communication between the smart storage unit and the server (See page 4, paragraph [0051]).

g.   As per claim 12, Nolan et al in view of Patel et al teaches the claimed invention as described above. However, Nolan et al failed to teach wherein the management controller is connected to the clients and the NAS servers by the communication link via the switch.

Patel et al teaches wherein the management controller is connected to the clients and the NAS servers by the communication link via the switch (See page 4, paragraph [0051])

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the management controller is connected to the clients and the NAS servers by the communication link via the switch as taught by Patel et al in the claimed invention of Nolan et al in order to establish communication between the smart storage unit and the server (See page 4, paragraph [0051]).

h.   As per claim 13, Nolan et al in view of Patel et al teaches the claimed invention as described above. However, Nolan et al failed wherein the switch is configured to provide data routing between the NAS server and the clients in response to control signals from the management controller.

Patel et al teaches wherein the switch is configured to provide data routing between the

NAS server and the clients in response to control signals from the management controller (See

page 4, paragraph [0051]).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate wherein the switch is configured to provide data routing between the

NAS server and the clients in response to control signals from the management controller as

taught by Patel et al in the claimed invention of Nolan et al in order to establish communication

between the smart storage unit and the server (See page 4, paragraph [0051]).

i.   As per claim 14, Nolan et al in view of Patel et al teaches the claimed invention as

described above. Furthermore, Nolan et al teaches wherein at least one NAS server comprises

one or more data storage devices and a storage controller for coordinating access to the data

storage devices (See col. 5, lines 7-15)

j.   As per claims 15 and 23, Nolan et al in view of Patel et al teaches the claimed invention

as described above. Furthermore, Nolan et al teaches wherein at least one NAS server

concurrently provides multiple data streams to multiple clients (See col. 7, lines 3-15).

k.   As per claims 17 and 25, Nolan et al in view of Patel et al teaches the claimed invention

as described above. Furthermore, Nolan et al teaches wherein management controller is

configured to allow addition or removal of one or more NAS servers (See col. 25, lines 14-25).

l.   As per claim 18, Nolan et al in view of Patel et al teaches the claimed invention as

described above. Furthermore, Nolan et al teaches wherein the management controller includes

an NAS monitor module which monitors operation of each NAS server, and selects NAS servers

to provide content files to clients (See col. 8, lines 25-35).

m.   As per claim 19, Nolan et al in view of Patel et al teaches the claimed invention as

described above. Furthermore, Nolan et al teaches wherein the management controller includes

a client interface module which receives requests from clients and forwards the requests to the

NAS monitor module (See col. 5, lines 7-29).

n.   As per claim 20, Nolan et al view of Patel et al teaches the claimed invention as described

above. Furthermore, Nolan et al teaches wherein each NAS server includes a data streaming

interface module which provides service for reading content files from that NAS server and

sending the data to the requesting client via a data stream (See col. 5, lines 30-35).

o.   As per claim 22, Nolan et al view of Patel et al teaches the claimed invention as described

above. Furthermore, Nolan et al teaches wherein at least one NAS server comprises one or more

data storage devices and a storage controller for coordinating access to the data storage devices

(See col. 6, lines 11-15).

p.   As per claim 26, Nolan et al in view of Patel teaches the claimed invention as described

above. Furthermore, Nolan et al teaches wherein each NAS server includes a data streaming

interface module which provides service for reading content files from that NAS server and sending the data to the requesting client via a data stream (See col. 5, lines 30-35 and col. 8, lines 24-35).

6.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,640,278 to Nolan et al in view of U.S Patent Application No. 2003/0033308 to Patel et al. as applied to claim 1 above, and further in view of U.S. Patent No. 6,407,680 to Lai et al.

a.   As per claim 3, Nolan et al in view of Patel teaches the claimed invention as described above. However, Noland et al in view of Patel failed to teach wherein: step (a) further includes the steps of obtaining identification information from each NAS server and maintaining that information; step (b) further includes the steps of maintaining content information corresponding to each identified NAS server; and step (d) further includes the steps of checking the content information to determine if one of the identified NAS servers stores the requested content file, and if so, selecting that NAS server and performing steps (e) and (f).

Lai et al teaches (a) further includes the steps of obtaining identification information from each NAS server and maintaining that information; step (b) further includes the steps of maintaining content information corresponding to each identified NAS server; and step (d) further includes the steps of checking the content information to determine if one of the identified NAS servers stores the requested content file, and if so, selecting that NAS server and performing steps (e) and (f) (See col. 13, lines 1-15).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate (a) further includes the steps of obtaining identification information from each NAS server and maintaining that information; step (b) further includes the steps of maintaining content information corresponding to each identified NAS server; and step (d) further includes the steps of checking the content information to determine if one of the identified NAS servers stores the requested content file, and if so, selecting that NAS server and performing steps (e) and (f) as taught by Lai et al in the claimed invention of Nolan et al in view of Patel et al in order for the media transcoding engine to avoid having to fetch the original media content when a subsequent request for the same media content is received (See col. 11, lines 60-64).

7.   Claims 4-6, 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,640,278 to Nolan et al in view of U.S Patent Application No. 2003/0033308 to Patel et al as applied to claim 1 above, and further in view of U.S. Patent No. U.S. Patent No. 6,466,978 to Mukherjee et al.

a.   As per claims 4,16 and 24, Nolan et al in view of Patel et al teaches the claimed invention as described above. However, Nolan et al in view of Patel failed to teach wherein: step (a) further includes the steps of providing one or more spare NAS servers; step (b) further includes the steps of storing content files on said spare servers; and the method further including the steps of: (g) detecting a fault in an NAS server currently providing requested content file to a client; (h) identifying a spare NAS server storing that requested content file; and (i) selectively re-

establishing said data stream between that client and the spare NAS storing the requested content

file, wherein that spare NAS server provides the content file to the client via the data stream,

independent of other NAS servers.

Mukherjee et al teaches step (a) further includes the steps of providing one or more spare

NAS servers; step (b) further includes the steps of storing content files on said spare servers; and

the method further including the steps of: (g) detecting a fault in an NAS server currently

providing requested content file to a client; (h) identifying a spare NAS server storing that

requested content file; and (i) selectively re-establishing said data stream between that client and

the spare NAS storing the requested content file, wherein that spare NAS server provides the

content file to the client via the data stream, independent of other NAS servers (See col. 9, 32-45

and col. 13, lines 37-45).

It would have been obvious to one with ordinary skill in the art at time the invention was

made to incorporate step (a) further includes the steps of providing one or more spare NAS

servers; step (b) further includes the steps of storing content files on said spare servers; and the

method further including the steps of: (g) detecting a fault in an NAS server currently providing

requested content file to a client; (h) identifying a spare NAS server storing that requested

content file; and (i) selectively re-establishing said data stream between that client and the spare

NAS storing the requested content file, wherein that spare NAS server provides the content file

to the client via the data stream, independent of other NAS servers as taught by Mukherjee et al

in the claimed invention of Nolan et al in view of Patel et al in order to provide recovery from

the failure of a server (See col. 9, lines 19-20).

b.   As per claim 5, Nolan et al in view of Patel et al teaches the claimed invention as

described above. However, Nolan et al in view of Patel failed to teach wherein step (e) further

includes the steps of authenticating the identity of the client before providing the requested

content file to the client.

Mukherjee et al teaches wherein step (e) further includes the steps of authenticating the

identity of the client before providing the requested content file to the client (See col. 10, lines

39-40).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate wherein step (e) further includes the steps of authenticating the identity

of the client before providing the requested content file to the client as taught by Mukherjee et al

in the claimed invention of Nolan et al in view of Patel et al in order to verify admission control

to the network and provide access to the server (See col. 10, lines 40-45).

c.   As per claim 6, Nolan et al in view of Patel et al teaches the claimed invention as

described above. However, Nolan et al in view of Patel failed to teach wherein step (f) further

includes the steps of receiving authentication information from that client, verifying the

authentication information, and providing the requested content file only if the authentication

information is verified.

Mukherjee et al teaches a multimedia file systems using file managers located on clients

for managing network attached storage devices. Furthermore, Mukherjee et al teaches the steps

of receiving authentication information from that client, verifying the authentication information,

and providing the requested content file only if the authentication information is verified (See

col. 10, lines 39-45).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate the steps of receiving authentication information from that client,

verifying the authentication information, and providing the requested content file only if the

authentication information is verified as taught by Mukherjee et al in the claimed invention of

Nolan et al in view of Patel et al in order to verify admission control to the network and provide

access to the server (See col. 10, lines 40-45).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

U.S. Patent No. 6,628,625 to Birdwell et al teaches a transmission announcement and

method for announcing upcoming data transmission over a broadcast network.

U.S. Patent No. 6,6725,253 to Okano et al teaches load balancing system.

U.S. Patent Application No. 2001/0018772 to video server for video distribution system.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Djenane M Bayard whose telephone number is (571) 272-3878.

The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Djenane Bayard

Patent Examiner

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER